

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) In a computing system that has access to schematized contact data stored according to a schema in a data store, and that is the data store being in communication with applications configured to request access to the schematized contact data in the data store, one or more of the applications lacking the configuration to natively access the schematized contact data, a method for simplifying access to the schematized contact data, the method comprising:

an application receiving a request to access schematized contact data stored in a data store, wherein the data store is centralized and acting as a single data store for contact data for a plurality of applications accessing contact data, and wherein the centralized data store stores all contact data for the plurality of applications according to a single schema for which the request being received at an application receiving the request that lacks the configuration to natively access schematized contact data;

the application calling an external contact data control that abstracts the formatting of the schematized contact data from the application calling the external contact data control request the contact data in a non-schematized format accessible to the application;

the application receiving non-schematized the requested contact data from the external contact data control in the non-schematized format, the non-schematized contact data received by the application having been converted from a corresponding schematized contact data format by the external data contact control; and

the application rendering, on causing a display device, rendered to display the contact data to a user of the application, the displayed rendered contact data corresponding to the non-schematized contact data received by the application in a non-schematized format and converted by the external contact data control from the schematized format, and the rendered contact data being displayed presented notwithstanding that the application lacks the configuration to natively access schematized the contact data stored in the data store according to the schema.

2. (Cancelled).

3. (Currently Amended) The method as recited in claim 1, wherein the act of the application receiving a request to access ~~schematized~~ contact data comprises an act of receiving a request at an application that is not authorized to directly access ~~the schematized contact data on the data store.~~

4. (Currently Amended) The method as recited in claim 1, wherein the act of the application calling an external contact data control ~~that abstracts the formatting of the schematized contact data from the application~~ comprises an act of calling a contact data control that prevents empty data fields from being presented.

5. (Currently Amended) The method as recited in claim 1, wherein the act of the application calling an external contact data control ~~that abstracts the formatting of the schematized contact data from the application~~ comprises an act of calling a contact data control that offers an actionable user-interface.

6. (Currently Amended) The method as recited in claim 5, further comprising:
selecting a portion of ~~rendered~~ displayed contact data from the actionable user-interface to cause an action associated with an updated application to be performed.

7. (Currently Amended) The method as recited in claim 1, wherein the act of the application calling an external contact data control ~~that abstracts the formatting of the schematized contact data from the application~~ comprises an act of calling an external contact data control that presents tasks associated with a data field when focus is shifted to the data field.

8. (Currently Amended) The method as recited in claim 1, wherein the act of the application calling an external contact data control ~~that abstracts the formatting of the schematized contact data from the application~~ comprises an act of calling an external contact data control that provides a pop-up menu to manipulate contact data.

9. (Currently Amended) The method as recited in claim 1, wherein the act of the application calling an external contact data control that abstracts the formatting of the schematized contact data from the application comprises an act of calling an external contact data control that determines the size of an interface based on the user-input.

10. (Currently Amended) The method as recited in claim 1, wherein the act of the application calling an external contact data control that abstracts the formatting of the schematized contact data from the application comprises an act of calling an external contact data control that appropriately presents contact data based on a location associated with the contact data.

11. (Currently Amended) The method as recited in claim 1, wherein the act of the application calling an external contact data control that abstracts the formatting of the schematized contact data from the application comprises an act of calling an external contact data control that determines the contact data to be ~~rendered~~ displayed based on user-input.

12. (Currently Amended) The method as recited in claim 11, wherein the act of calling a contact data control that determines the contact data to be ~~rendered~~ displayed based on user-input comprises an act of determining the contact data to be ~~rendered~~ displayed based on a presentation template.

13. (Currently Amended) The method as recited in claim 11, wherein the act of calling a contact data control that determines the contact data to be ~~rendered~~ displayed based on user-input comprises an act of determining the contact data to be ~~rendered~~ displayed based on a dynamically updated presentation template.

14. (Currently Amended) The method as recited in ~~claim 1~~ claim 11 wherein the act of the application calling an external contact data control that determines the contact data to be rendered ~~displayed~~ based on user-input comprises an act calling an external contact data control that sets a default value for a multi-value set.

15. (Currently Amended) In a computing system that has access to schematized contact data that is stored in a centralized data store according to a single schematized format for multiple applications, and that is in the data store being in communication with applications configured to request access to schematized contact data, one or more of the applications lacking the configuration to natively access schematized contact data in the data store, a method for simplifying access to the schematized contact data, the method comprising:

~~receiving non-schematized contact data for one or more contacts, the contact data being received by that the non-schematized contact data being received at an application that lacks the configuration to natively access contact data of a schematized format, that lacks the configuration to natively access schematized contact data and from an external contact data control, the non-schematized contact data having been converted from corresponding schematized contact data by the external contact data control;~~

~~the application rendering, oncausing a display device, rendered- to display to a user of the application at least a portion of the contact data for the one or more contacts; to a user of the application, the rendered contact data corresponding to the non-schematized contact data;~~

~~receiving, at the application, updates to the rendered contact data for the one or more contacts;~~

~~the application calling an-the external contact data control, that abstracts the formatting of the schematized contact data from the application calling the external contact data control; wherein calling the external contact data control includes the application sending the updates to the contact data to the external contact data control in a non-schematized format;~~

~~the external contact data control receiving updated non-schematized contact data corresponding to the updated rendered contact data and which is to be included in the schematized contact data;~~

the external contact data control updating the schematized-contact data for the one or more contacts in a centralized data store to reflect the updates to the contact data, the centralized data store acting as a single data store for contact data for the application and one or more other applications that access the contact data, the centralized data store storing the contact information in the schematized format, and the updated contact data in the data store being stored in the schematized format based on the updated non-schematized contact data such that the one or more other applications can access the updated schematized-contact data in the schematized format and notwithstanding that the application lacks the configuration to natively access schematized contact data; and using the application or the one or more other applications, accessing the updated contact data from the centralized data store and displaying the updated contact data to a user of the respective application.

16. (Currently Amended) The method as recited in claim 15, wherein the an act of receiving ~~non-schematized contact data that is to be included in schematized contact data~~ comprises an act of receiving non-schematized contact data in a non-schematized format and at an application that lacks the functionality to convert between the schematized format contact data and the non-schematized contact data format.

17. (Currently Amended) The method as recited in claim 15, wherein the an act of receiving ~~non-schematized contact data that is to be included in schematized contact data~~ comprises an act of receiving non-schematized data at an application that is not authorized to directly access the ~~schematized contact data~~ data store to obtain the contact data.

18. (Currently Amended) The method as recited in claim 15, wherein the act of calling the application an external contact data control that abstracts the formatting of the schematized contact data from the application comprises an act of calling an external contact data control that checks the validity of the received non-schematized contact data received by the application in a non-schematized format.

19. (Currently Amended) The method as recited in claim 15, wherein the act of the application calling an external contact data control ~~that abstracts the formatting of the schematized contact data from the application~~ comprises an act calling an external contact data control that is configured to translate the received ~~non-schematized contact data into from the non-schematized format into the schematized format~~ contact data.

20. (Cancelled).

21. (Currently Amended) A computing system, comprising:

one or more processors; and

one or more computer-readable storage media, having stored thereon:

a centralized data store acting as a single data store of schematized-contact data for a plurality of applications which access the contact data, wherein the centralized data store stores all contact data for the plurality of applications and according to a single schema not natively accessible by one or more of the plurality of applications.

one or more of the plurality of applications that are not configured to natively access the schematized contact data, and

at least one external contact data control that can be executed by the one or more processors, the at least one external contact data control ~~abstracting schematized contact data from applications, the at least one contact data control~~ being configured to:

receive a request from an application that lacks the configuration to natively access the ~~schematized-contact data~~ stored at the centralized data store in the schematized format;

retrieve ~~schematized-contact data~~ from the centralized data store and in the schematized format in response to the request;

~~abstract formatting of the schematized contact data from the application that lacks the configuration to natively access the schematized contact data;~~

convert retrieved ~~schematized-contact data~~ from the schematized format to a corresponding non-schematized contact data-format such that the application can present contact data to a user notwithstanding that the application lacks the configuration to access ~~the schematized-contact data~~ directly in the schematized format; and

send the ~~non-schematized-contact data~~ in the non-schematized format to the application to be presented to a user.

22. (Currently Amended) The system as recited in claim 21, wherein the external contact data control is further configured to alter how the non-schematized-contact data of the non-schematized format is presented at the application.

23. (Currently Amended) The system as recited in ~~claim 21~~claim 22, wherein the external contact data control being configured to alter how the non-schematized-contact data of the non-schematized format is presented at the application comprises the external contact data control being configured to prevent empty data fields from being presented.

24. (Currently Amended) The system as recited in ~~claim 21~~claim 22, wherein the external contact data control being configured to alter how the non-schematized-contact data of the non-schematized format is presented at the application comprises the external contact data control being configured to offer an actionable user-interface.

25. (Currently Amended) The system as recited in ~~claim 21~~claim 22, wherein the external contact data control being configured to alter how the non-schematized-contact data of the non-schematized format is presented at the application comprises the external contact data control being configured presents tasks associated with a data field when focus is shifted to the data field.

26. (Currently Amended) The system as recited in ~~claim 21~~claim 22, wherein the external contact data control being configured to alter how the non-schematized-contact data of the non-schematized format is presented at the application comprises the contact data control being configured to provide a pop-up menu to manipulate contact data.

27. (Currently Amended) The system as recited in ~~claim 21~~claim 22, wherein the external contact data control being configured to alter how the non-schematized-contact data of the non-schematized format is presented at the application comprises the contact data control being configured to set a default value for a multi-value set.

28. (Currently Amended) A computing system, comprising:

one or more processors; and

one or more computer-readable storage media, having stored thereon:

a centralized data store acting as a single data store of schematized contact data for a plurality of applications which access the contact data, wherein the centralized data store stores all contact data for the plurality of applications and according to a single schema not natively accessible by one or more of the plurality of applications.

one or more of the plurality of applications lacking the configuration to natively access the schematized contact data, and

at least one external contact data control that can be executed by the one or more processors, ~~the at least one contact data control abstracting schematized contact data from applications, the at least~~ external one contact data control being configured to:

receive an request from an application to access schematized contact data for one or more contacts, the contact data being stored in the centralized data store in a schematized format, and the application making the request; notwithstanding the application lacking the configuration to natively access ~~schematized contact data in the schematized format;~~

~~abstract the formatting of the schematized contact data from the application calling the external contact data control;~~

retrieve ~~schematized contact data~~ from the centralized data store corresponding to the request from the application, the retrieved contact data being in the schematized format;

convert the ~~schematized contact data~~ in the schematized format to a corresponding non-schematized contact data ~~formatusing the formatting abstracted from the application by the external contact data control;~~ send the ~~non-schematized contact data to the application;~~

receive updated ~~non-schematized contact data~~ in a non-schematized format from the application;

using the formatting abstracted from the application to convert the updated non-schematized contact data from the non-schematized format to a corresponding schematized contact data format that conforms with a the contact data schema of the centralized data source, thereby allowing the such that an application can to update schematized contact data of the in the schematized format notwithstanding that the application lacks the configuration to natively access the schematized contact data stored in the schematized format; and

store corresponding schematized contact data in the centralized data store and in the schematized format such that other applications can access the stored schematized contact data in accordance with the contact data schema.

29. (Currently Amended) The system as recited in claim 28, wherein the external contact data control is configured to convert the non-schematized contact data from the non-schematized format to a corresponding schematized contact format by calling a parser that parses the non-schematized contact data of the non-schematized format such that the non-schematized contact data can be made to conform with a the contact data schema.

30. (Currently Amended) The system as recited in claim 28, wherein the external contact data control is configured to convert the non-schematized contact data from the non-schematized format to a corresponding schematized contact data format by checking the validity of received non-schematized contact data of the non-schematized format.